



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SERIAL NUMBER 077937,560	FILING DATE 08/31/92	FIRST NAMED INVENTOR MC GARVEY	ATTORNEY DOCKET NO. R A-19095
-----------------------------	-------------------------	-----------------------------------	----------------------------------

24M1/0902

CUMMING, S.  
EXAMINER

LANE, AITKEN AND MC CANN  
WATERGATE OFFICE BUILDING, SUITE 600  
2600 VIRGINIA AVENUE, N.W.  
WASHINGTON, DC 20037

ART UNIT 2406	PAPER NUMBER 6
------------------	-------------------

09/02/93

DATE MAILED:

This is to certify that you have been examined by the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

This application has been examined  Responsive to communication filed on \_\_\_\_\_  This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

1.  Notice of References Cited by Examiner, PTO-892.
2.  Notice re Patent Drawing, PTO-948.
3.  Notice of Art Cited by Applicant, PTO-1449.
4.  Notice of Informal Patent Application, Form PTO-152.
5.  Information on How to Effect Drawing Changes, PTO-1474.
6.  \_\_\_\_\_

**Part II SUMMARY OF ACTION**

1.  Claims 1-23 are pending in the application.

Of the above, claims 1-18, 22 are withdrawn from consideration.

2.  Claims \_\_\_\_\_ have been cancelled.

3.  Claims \_\_\_\_\_ are allowed.

4.  Claims 19-21, 23 are rejected.

5.  Claims \_\_\_\_\_ are objected to.

6.  Claims \_\_\_\_\_ are subject to restriction or election requirement.

7.  This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8.  Formal drawings are required in response to this Office action.

9.  The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are  acceptable.  not acceptable (see explanation or Notice re Patent Drawing, PTO-948).

10.  The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_ has (have) been  approved by the examiner.  disapproved by the examiner (see explanation).

11.  The proposed drawing correction, filed on \_\_\_\_\_, has been  approved.  disapproved (see explanation).

12.  Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has  been received  not been received  been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_

13.  Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14.  Other

**EXAMINER'S ACTION**

Art Unit: 2406

1. Applicant's election of species I in Paper No. 5 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (M.P.E.P. § 818.03(a)).

Applicant states that claims 1-11, 15, 16, 18-21, and 23 read on the elected invention. The Examiner disagrees with this assertion. The elected invention comprises a sealing structure in which the gasket has an initial diameter that is somewhat ~~greater~~<sup>smaller</sup> than the inner diameters of the tubular members. Upon tightening to form a seal, the inner diameter of the gasket is forced radially outward so that its diameter is "equal" to the inner diameters of the tubular members. As noted by Applicant on pg. 2 of paper #3, included in the non-elected inventions is a structure in which the gasket's initial inner diameter is equal to the inner diameters of the tubular members. Upon tightening to form a seal, the inner diameter of the gasket is forced radially outward so that its inner diameter is "substantially equal" to the inner diameters of the tubular members. Applicant states on pg. 2 of the current response (paper #5), "where the small difference just described exists, the claim language "substantially equal" has been used". From the above discussion it is clear that claims 1 and 18 (as well as dependent claims 2-17 and 22), which are drawn to a gasket having a diameter that is "substantially" the same as the tubular members, are NOT drawn to the elected invention (as depicted in figs. 1, 2, 5, and 6). Therefore, claims 1-18 and 22 are withdrawn from further consideration as being drawn to a non-elected invention.

Art Unit: 2406

2. Claims 19 and dependent claims 20-22 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19: Line 10; the phrase "minimum dead volume" is indefinite because the amount of dead volume Applicant considers to be "minimum" cannot be ascertained with any degree of specificity. Lines 10-11; the phrase "minimum dead volume exists in said fitting" is unclear and indefinite because it fails to specify **WHEN** the minimum dead volume exists (i.e. - in the relaxed state or in the tightened state?).

3. Claims 19 and 20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, and 9 of U.S. Patent No. 5,222,747. Although the conflicting claims are not identical, they are not patentably distinct from each other because all features of the present claims have been previously recited in Applicant's prior patent. In particular, the patented claims call for the gasket to be deformed so that "no space is left between the radially inner side of said gasket and said rectilinear profile".

4. Claim 23 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, and 9 of U.S. Patent No. 5,222,747 in view of Leigh.

Art Unit: 2406

To the extent that the claimed "method" steps of "engaging" and "tightening" are not implicit in the seal structure of the abovementioned claims, Leigh teaches the claimed steps of "engaging" and "tightening" (see column 3) to form a seal of the type claimed.

Therefore it would have been obvious, in view of Leigh, to engage the gasket and tighten the tubular members in order to form an effective seal.

5. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

6. Claims 19, 20, and 23 are rejected under 35 U.S.C. § 103 as being unpatentable over Leigh in view of White.

This rejection is set forth in ¶5 of the office action mailed 3/30/90 of parent application 392,460. This rejection, and the comments associated therewith, are incorporated herein by reference.

Art Unit: 2406

Leigh discloses a seal structure and the claimed method steps of engaging and tightening, but does not disclose the minimization or elimination of dead volumes by making the inner diameter of the gasket equal to the inner diameters of the tubular members.

White teaches minimization or elimination of dead volumes by providing a sealing structure in which the inner diameter of the sealing gasket is equal to the inner diameter of the tubular members.

Therefore it would have been obvious, in view of White, to provide the claimed sealing structure in which the inner diameters of the gasket and tubular members are equal in order to minimize or eliminate zero dead volumes.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 19 and 20 are rejected under 35 U.S.C. § 102(a) as being anticipated by PCT

378.  
13495

Art Unit: 2406

*3495*                   *3495*  
PCT'378 discloses all features of the above claims. PCT'378 discloses some embodiments (e.g. - figs 1 and 4) wherein rounded sealing beads seal against a sealing gasket and a seal is formed having "minimum" dead volume.

Claim 23 is rejected under 35 U.S.C. § 102(b) as being anticipated by PCT'378.

*3493*  
PCT'378 also discloses a sealing structure formed by engaging and tightening that includes a gasket that has beveled sealing faces (24', 24) that are engaged by sealing bead formations that will urge the gasket radially outward. The resulting seal (fig. 2) has "minimum" dead volume.

NOTE: Claims 19 and 20 are viewed as being adequately supported by the disclosures of the parent applications, therefore these claims are afforded the filing dates of these applications (the earliest of which being 8/11/89). Claims 21 and 23 are not viewed as being adequately supported by the disclosures of the parent applications, therefore the effective filing date of this claim is 8/31/92. See, M.P.E.P. §201.11.

8. Claim 21 would be allowable if rewritten to overcome the rejection under 35 U.S.C. § 112 and to include all of the limitations of the base claim and any intervening claims.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Serial Number: 07/937,560

-7-

Art Unit: 2406

As noted by Applicant, the art cited but not applied was previously cited in relayed parent applications. An explanation of their relevance appears therein.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott W. Cummings whose telephone number is (703) 308-0791.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0771.

S.C.

August 25, 1993



Scott W. Cummings

Patent Examiner